

**UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

MICHAEL SANDBORN & MARK SANDBORN PARTNERSHIP, et al.,)	
)	
Plaintiffs,)	Civil Action No.
)	11-11472-FDS
v.)	
)	
AVID TECHNOLOGY, INC.,)	
)	
Defendant.)	
)	

**MEMORANDUM AND ORDER ON
MOTION FOR JUDGMENT ON THE PLEADINGS**

SAYLOR, J.

This is a patent infringement action involving musical notations that use color to demonstrate harmonic structure. The patent at issue, U.S. Patent No. 6,930,235 B2, claims methods and systems for correlating colors with musical notes. Plaintiffs Michael Sandborn & Mark Sandborn Partnership, Michael Sandborn, Mark Sandborn, and MS Squared seek a judgment under 35 U.S.C. § 271 that their patent is infringed by a software program, Sibelius, that was created by defendant Avid Technology, Inc. Defendant has asserted a number of counterclaims, including non-infringement and invalidity.

Defendant has moved for judgment on the pleadings on the ground that plaintiffs' claims recite unpatentable subject matter under 35 U.S.C. §101 and are therefore invalid. For the reasons set forth below, the motion will be denied.

I. Background

Unless otherwise noted, all facts are set forth as alleged in the complaint.

On August 16, 2005, the United States Patent and Trademark Office issued U.S. Patent No. 6,930,235 B2 (“the ’235 patent”). (Compl. ¶ 9). The patent covers methods and systems for (1) “assigning colors to musical notes and musical notation,” (2) “creat[ing] musical notation with colors,” and (3) “read[ing] and display[ing] such musical notation.” (*Id.*) The Michael Sandborn & Mark Sandborn Partnership, Michael Sandborn, Mark Sandborn, and MS Squared own the rights to the ’235 patent. (Compl. ¶ 10).

Defendant Avid Technology, Inc. owns the right to a popular software product, Sibelius, that creates, reads, displays, and prints musical scores. (Compl. ¶ 11). Among other options, Sibelius offers users the ability to create scores that include colored annotations. (*Id.*). Plaintiff alleges that Sibelius uses, or has used, the methods and systems set forth in the ’235 patent without permission. (*Id.*).

According to plaintiffs, Avid was made aware of the existence of the ’235 patent in February 2009. (Compl. ¶ 13). Avid did not seek a license to use the patented methods or systems, nor did it remove the use of those methods and systems from its product. (*Id.*).

In May 2009, Avid released a new version of Sibelius, called version 6. (Compl. ¶ 14). The version eliminated the “Pitch Spectrum” feature, which had previously created colored musical scores. (*Id.*). Sibelius users complained about the removal of the “Pitch Spectrum” feature. The complaint alleges that an Avid employee indicated that it was removed “for legal reasons,” and the same employee and others posted “work-arounds” on the Avid website to allow users to return the functionality of the feature to version 6. (Compl. ¶¶ 15-16).

The Sandborns filed the present suit on August 17, 2011. Avid answered the complaint on December 19, 2011, and filed counterclaims of invalidity and non-infringement. The parties

proceeded with discovery until August 9, 2012, when a suggestion of bankruptcy was filed in the case regarding Michael Sanborn. The parties requested, and were granted, a stay of the action pending resolution of the bankruptcy issues. In February 2013, the stay was lifted. On March 15, 2013, defendant filed a motion for judgment on the pleadings.

II. Standard of Review

A Rule 12(c) motion for judgment on the pleadings “is treated much like a Rule 12(b)(6) motion to dismiss.” *Perez-Acevedo v. Rivero-Cubano*, 520 F.3d 26, 29 (1st Cir. 2008). It differs from a Rule 12(b)(6) motion primarily because it is filed after the close of pleadings and “implicates the pleadings as a whole.” *Aponte-Torres v. University of Puerto Rico*, 445 F.3d 50, 54-55 (1st Cir. 2006). To survive a motion for judgment on the pleadings, a plaintiff “must state a claim that is plausible on its face.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). The plausibility standard “is not akin to a ‘probability requirement,’ but it asks for more than a sheer possibility that a defendant has acted unlawfully.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009).

Because a Rule 12(c) motion “calls for an assessment of the merits of the case at an embryonic stage, the court must view the facts contained in the pleadings in the light most favorable to the nonmovant and draw all reasonable inferences therefrom to the nonmovant’s behoof.” *R.G. Financial Corp. v. Vergara-Nunez*, 446 F.3d 178, 182 (1st Cir. 2006).

Whether a claim is drawn to patent-eligible subject matter under § 101 is an issue of law. *In re Bilski*, 545 F.3d 943, 951 (Fed. Cir. 2008). Some courts have considered the issue of § 101 patentability at the pleadings stage. *See, e.g., OPI Technologies, Inc. v. Amazon.com, Inc.*, 2012 WL 3985118 (N.D. Cal. Sept. 11, 2012); *Glory Licensing LLC v. Toys R Us, Inc.*, 2011 WL 1870591 (D.N.J. May 16, 2011). However, the Federal Circuit has cautioned that dismissal for

lack of patentable subject matter at the pleading stage should be “the exception, not the rule.”

Ultramercial, Inc. v. Hulu, LLC, 2013 U.S. App. LEXIS 12715, *6 (Fed. Cir. June 21, 2013).

“Every issued patent is presumed to have been issued properly, absent clear and convincing evidence to the contrary.” *Id.*, at *5. Thus, if unpatentability is raised as an affirmative defense under rule 12, “dismissal is appropriate only if the well-pleaded factual allegations in the complaint, construed in the light most favorable to the plaintiff, suffice to establish the defense.”

Id. at *5-6.

III. Analysis

A. Statutory Framework

Section 101 of the Patent Act provides that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101 (2006).¹ In choosing such broad categories of patent-eligible subject matter, Congress “plainly contemplated that the patent laws would be given wide scope.”

Diamond v. Chakrabarty, 447 U.S. 303, 308 (1980).

Despite the breadth of patent-eligible subject matter, the Supreme Court has recognized a limited exception from patent eligibility for “laws of nature, natural phenomena, and abstract ideas.” *See, e.g., Diamond v. Diehr*, 450 U.S. 175, 185 (1981). This exception is intended to prevent “monopolization” of “the basic tools of scientific and technological work,” because patents covering such topics “might tend to impede innovation more than it would tend to promote it.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012).

¹ As set forth in §100(b), the term “process” means “process, art, or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.”

Courts have struggled to designate the boundaries of what concepts are truly so elemental that they cannot be patented. “[A]ll inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo Collaborative Servs.*, 132 S. Ct. at 1293. While fundamental natural laws and abstract ideas cannot be protected by patents, “an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Diehr*, 450 U.S. at 187. Thus, courts must determine whether a patent truly claims a law of nature, natural phenomena, or abstract idea, or merely makes use of such elemental concepts as part of a larger invention. The issues of novelty and obviousness do not bear on the question of subject-matter eligibility. *Diehr*, 450 U.S. 188-89.

Neither the Supreme Court nor the Federal Circuit has set forth any definitive framework for conducting the § 101 analysis in the context of an allegedly abstract concept.² Indeed, members of both courts have recognized “the difficulty of providing a precise formula or definition for the abstract concept of abstractness.” *Ultramercial*, 2013 U.S. App. LEXIS 12715 at *19. Nevertheless, the courts have established certain principles to guide lower courts’ analyses.

An abstract idea is “one that has no reference to material objects or specific examples—i.e., it is not concrete.” *Id.* at *18. A claim is not patentable if it “wholly pre-empt[s]” the use of or “effectively grants a monopoly over” an abstract idea. *Gottschalk v. Benson*, 409 U.S. 63, 72 (1972); *Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2010). Instead, a patent-eligible claim must include elements that add “significantly more” to the basic principle.

² The Federal Circuit recently attempted to do just that in the context of “computer-implemented inventions.” See *CLS Bank Int’l v. Alice Corporation Pty. Ltd.*, 717 F.3d 1269 (Fed. Cir. 2013). However, no portion of any opinion other than the *per curiam* judgment in that case garnered a majority. Thus, though the opinion included lengthy discussion on the topic, it created no binding precedent.

Mayo Collaborative Servs., 132 S. Ct. at 1294. Methods that “claim[] a mental process standing alone and untied to another category of statutory subject matter” are unpatentable, “even when a practical application [is] claimed.” *In re Comiskey*, 554 F.3d 967, 980 (Fed. Cir. 2009). “The relevant inquiry is whether a claim, as a whole, includes *meaningful* limitations restricting it to an application, rather than merely an abstract idea.” *Ultramercial*, 2013 U.S. App. LEXIS 12715 at *22. At the same time, the Federal Circuit has indicated that the

disqualifying characteristic [of abstractness] should exhibit itself so manifestly as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act.

Research Corp. Techs. v. Microsoft Corp., 627 F.3d 859, 868 (Fed. Cir. 2010). A claimed invention must be considered as a whole, and “a new combination of steps may be patentable even though all the constituents of the combination were well known and in common use before the combination was made.” *Diehr*, 450 U.S. at 188.

One “important and useful clue” in determining patent eligibility is the “machine-or-transformation test.” *Mayo Collaborative Servs.*, 132 S.Ct. at 1296. Under that test, an invention is eligible for a patent under § 101 if “(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” *Bilski*, 130 S. Ct. at 3225-26. However, the Supreme Court has rejected the machine-or-transformation test as the “exclusive metric for determining the subject[-]matter eligibility of processes.” *Ultramercial*, 2013 U.S. App. LEXIS 12715, at *18 (citing *Bilski*, 130 S. Ct. at 3227). In *Bilski*, the Court indicated that the machine-or-transformation test was “a useful and important clue,” but not “the sole test for deciding whether an invention is a patent-eligible ‘process.’” *Bilski*, 130 S.Ct. at 3227.

In conducting the § 101 analysis, courts must beware not to interpret the statute “in ways that make patent eligibility ‘depend simply on the draftsman’s art’ without reference to the ‘principles underlying the prohibition against patents for natural laws.’” *Mayo Collaborative Servs.*, 132 S. Ct. at 1294 (quoting *Parker v. Flook*, 437 U.S. 584, 593 (1978)). Thus, courts will not allow parties to circumvent the prohibition against patenting abstract ideas by limiting the use of their claim to a particular field, or by reciting insignificant post-solution limitations. See *Bilksi*, 130 S.Ct. at 3225; *Diehr*, 450 U.S. at 191-92.

B. The Claimed Invention

The '235 patent claims a process for relating music to colors. Specifically, it claims a method and system wherein the twelve colors in a color spectrum are assigned to the twelve tones of a chromatic scale based on their positions in the Circle of Fifths. They are assigned according to proximity on each respective scale, so that the colors that are closest to each other on the spectrum correspond with the tones that share the most harmonic relationships. According to plaintiff, the color scheme aids in music education by making “additional information about the harmonic structure of a piece readily apparent,” (Pl. Br. at 5), and accordingly offers an improvement over previous systems of musical notation.

Defendant contends that the patent is invalid under § 101 because the claimed invention involves only mental processes that could be performed entirely in the human mind or by a human using a pen and paper. Because mental processes are a subset of abstract ideas, defendant contends that the invention is unpatentable.

If, as defendant suggests, the patent claimed only the concept of assigning colors to notes, the claimed invention would be likely unpatentable under § 101. However, defendant’s

argument somewhat oversimplifies the nature of the claims at issue. For example, claim 1 states as follows:

1. A method for relating electromagnetic waves to harmonic sound waves, comprising the steps of:

assigning one fundamental color of a color spectrum of twelve analogous colors to one of twelve fundamental tones of a musical 5th relationship, wherein the tones are represented by notes; and consecutively associating the remaining analogous colors to the tones.

U.S. Patent No. 6,930,235 B2 (Filed Mar. 14, 2002).³ As defendant highlights, the claim does set out the abstract concept of using colors to represent different tones. However, the claim goes on to indicate that the colors should be assigned to “tones . . . represented by notes.”⁴ It also specifies how those colors should be assigned to notes: by combining two well-known concepts—a twelve-shade color wheel and the Circle of Fifths—to create a specific system of musical notation that depicts notes with highly harmonic relationships in proximate colors on the color spectrum.

A claim can embrace an abstract idea and still be patentable. *See Mayo Collaborative Servs.*, 132 S. Ct. at 1294. The fundamental inquiry in determining patentability is whether a claim covers only an abstract idea, or instead covers an *application* of an abstract idea. *Ultramercial*, 2013 U.S. App. LEXIS 12715. In this procedural posture, “the complaint and the patent must by themselves show clear and convincing evidence that the claims is not directed to

³ Neither party has put a copy of the ’235 patent before the Court. However, because the patent is repeatedly referred to in both the complaint and the answer, and because it is a matter of public record, the Court may properly consider it.

⁴ Although the terms “tone” and “note” are sometimes used interchangeably, they appear to carry slightly different meanings in this context. Apparently, a “tone” is the sound heard by the ear, and a “note” is the symbol or character that is used to represent the duration and pitch of that tone in writing.

an application of an abstract idea, but to a disembodied abstract idea itself.” *Id.* at *37. Such clear and convincing evidence has not been presented here. Defendant has not clearly established, at least at this stage, that the only plausible construction of the patented claims results in an unpatentable mental process, nor has it clearly established that no construction of the term could provide sufficient limitations on the abstract concept. Taken in the light most favorable to the plaintiff, it is not clear that the claims necessarily constitute mental processes or abstract ideas. Accordingly, the claims do not necessarily “wholly pre-empt” use of any abstract concept, *Benson*, 409 U.S. at 72 , nor do they appear to “preclude practically any musical notation system using colors in conjunction with notes.” (Def. Br. at 14).

Defendant also contends that the patent claims fail the “machine or transformation” test. Although plaintiffs concede that the claims at issue are not tied to any machine or apparatus, and thus do not meet the first prong of the test, they contend that the invention is transformative. However, even taking defendant’s contention as true, judgment on the pleadings is inappropriate. Recent decisions from both the Supreme Court and the Federal Circuit make clear that the machine-or-transformation test is not an exclusive metric for determining patent eligibility. See *Bilski*, 130 S.Ct. at 3227; *Ultramercial*, 2013 U.S. App. LEXIS 12715. Rather, it is simply “a useful and important clue.” *Bilski*,130 S.Ct. at 3227. Regardless of whether the claims pass the machine-or-transformation test, this Court will need to determine whether they “include[] meaningful limitations restricting [them] to an application, rather than merely an abstract idea.” *Ultramercial*, 2013 U.S. App. LEXIS 12715 at *22.

This Court cannot make that determination at this stage. The question of what limitations are, or are not, included in the claim terms is, among other things, inherently tied up with the

process of claim construction. Because this Court has not engaged in any claim construction, it cannot make any final determination as to whether the terms of the claims are sufficiently restricted to an application of an abstract idea, rather than an abstract idea itself.⁵

In summary, defendant has not met the heavy burden that is required to support a finding of unpatentability at this early stage in the suit. Accordingly, defendant's motion for judgment on the pleadings will be denied.

IV. Conclusion

For the foregoing reasons, defendant's motion for judgment on the pleadings is DENIED.

So Ordered.

/s/ F. Dennis Saylor
F. Dennis Saylor IV
United States District Judge

Dated: September 5, 2013

⁵ The Court also notes that patents appear to have been issued for more than a century protecting systems of musical notation, including systems based on assigning colors to tones. *See, e.g.*, U.S. Patent No. 122,096 (filed Dec. 26, 1871); U.S. Patent No. 7,148,414 (filed June 18, 2003); U.S. Patent No. 6,831,219 B1 (filed Apr. 22, 2002).